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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/761,794
Applicant: : Bastiaan Driehuys
Filed : Jan. 21, 2004
TC/A.U. : 1616
Examiner: : To Be Assigned

Confirmation No. 2288

Docket No. : PM0045CON
Customer No. : 36335

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Signature Lori Allaire
Date FEB. 1, 2005

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT
CITATION UNDER 37 C.F.R. § 1.97

Sir:

Attached is a list of documents on Form PTO-1449. The present application is a continuation application or application number 09/904,343, and the prior art cited in the parent applications should be taken into consideration in the present application. In accordance with MPEP §2001.06(b), no copies of the prior art in the parent applications are submitted herewith. Confirmation that the prior art cited in the parent application has been considered in the next Official Action is most respectfully requested

Respectfully submitted,

Robert F. Chisholm
Reg. No. 39,939

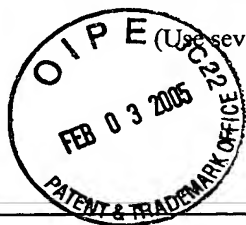
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FORM PTO-1449 U.S. Department of Commerce
Patent and Trademark Office

Attorney Docket Number
PM0045 CON

Serial No.
10/761,794

LIST OF DOCUMENTS CITED BY APPLICANT



(Use several sheets if necessary)

Applicants: Bastiaan Driehuys

Filing Date Jan. 21, 2004

Group
1616

U. S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	5,545,396	08/13/96	Albert et al.	424	93	
	5,617,860	04/08/97	Chupp et al.	128	653.4	
	5,642,625	07/01/97	Cates, Jr. et al.	62	55.5	
	5,809,801	09/22/98	Cates, Jr. et al.	62	637	
	5,936,404	08/10/99	Ladebeck et al.	324	300	
	6,033,645	03/07/00	Unger, et.al.	424	9.5	
	6,051,208	04/18/00	Johnson et al.	424	9.3	
	6,079,213	06/27/00	Driehuys et al.	62	3.1	
	6,237,363	05/29/01	Zollinger et al.	62	600	
	6,338,836	01/15/02	Kuth, et.al.	424	9.3	
	6,370,415	04/09/02	Weiler, et.al.	600	410	

FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation Yes No
WO 97/37239	10/97	PCT			
WO99/07415	11/08/98	PCT			
WO 99/25243	27/05/99	PCT			
WO99/47940	23/09/99	PCT			
WO 99/52428	21/10/99	PCT			
WO 99/53332	12/10/99	PCT			
GB2091884	04/08/82	United Kingdom			
WO 00/23797	27/04/00	PCT			
WO00/40972	13/07/00	PCT			
WO01/74246	11/10/01	PCT			
WO02/04709	17/01/02	PCT			
EP0933062	04/08/99	EP			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Albert et al., "Measurement of ¹²⁹ Xe T1 in Blood to Explore the Feasibility of Hyperpolarized ¹²⁹ Xe

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Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office LIST OF DOCUMENTS CITED BY APPLICANT (Use several sheets if necessary)		Attorney Docket Number PM0045 CON	Serial No. 10/761,794
		Applicants: Bastiaan Driehuys	
		Filing Date Jan. 21, 2004	Group 1616
		MRI," Jour. Comp. Ass. Tomography, Vol. 19, No. 6 (Nov.-Dec. 1995).	
		Bárány, M. et al., "High Resolution Proton Magnetic Resonance Spectroscopy of Human Brain and Liver," Magn. Reson. Imaging, 5:393 (1987).	
		Bifone, et al., "NMR of laser-polarized xenon in human blood," Proc. Natl. Acad. Sci. USA, Vol. 93, pp. 12932-12936 (November 1996).	
		Brookeman, J.R., "MRS and MRI of Hyperpolarized ^{129}Xe : Studies in Human Volunteers," Proc ISMRM (1998)	
		de Lange et al., "Lung Airspaces: MR Imaging Evaluation with Hyperpolarized Helium-3 Gas," Radiology 210, 851-857(1999).	
		Diehl et al., "Nuclear Magnetic Relaxation of the ^{129}Xe and ^{131}Xe Isotopes of Xenon Gas Dissolved in Isotropic and Anisotropic Liquids," J. Magn. Reson., Vol. 88, pp. 660-665 (1990).	
		Donnelly et al., "Cystic Fibrosis: Combined Hyperpolarized ^3He -enhanced and Conventional Proton MR Imaging in the Lung—Preliminary Observations," Radiology 212 (September 1999), 885-889 (1999).	
		Goodson et al., "In vivo NMR and MRI Using Injection Delivery of Laser-Polarized Xenon," 94 Proc. Natl. Acad. Sci. USA, pp. 14725-14729 (1997).	
		Grover, B.D., "Noble-Gas NMR Detection through Noble-Gas-Rubidium Hyperfine Contact Interaction," Phys. Rev. Lett., Vol. 40, No. 6, pp. 391-392 (1978).	
		Hou, et al., "Optimization of Fast Acquisition Methods for Whole-Brain Relative Cerebral Blood Volume (rCBV) Mapping with Susceptibility Contrast Agents," J. Mag. Res. Imaging, Vol. 9 pp. 233-239 (1999).	
		Il'yasov et al., " ^{129}Xe NMR in Study of Tissues and Plants," Appl. Magn. Reson. Vol. 17, pp. 17-84 (1999).	
		Jameson et al., "Nuclear Spin Relaxation by Intermolecular Magnetic Dipole Coupling in the Gas Phase. ^{129}Xe in Oxygen," J. Chem. Phys., Vol. 89, p. 4074-4081 (1988).	
		Kaatz et al., "A comparison of molecular hyperpolarizabilities from gas and liquid," J. Chem. Phys., Vol. 108, No. 3, pp. 849-856 (1/15/98).	
		Kaiser, et al., "Diffusion and field-gradient effects in NMR Fourier spectroscopy," J. Chem. Phys., Vol. 60, No. 8, pp. 2967-2979 (15 April 1974).	
		MacFall et al., "Human Lung Air Spaces: Potential for MR Imaging with Hyperpolarized He-3^1 ," Radiology, Vol. 200, No. 2, pp. 553-558 (1996).	
		Mansfeld et al., "The use of ^{129}Xe NMR exchange spectroscopy for probing the microstructure of porous materials," Chem. Phys. Ltrs., Vol. 213, No. 1, 2, pp. 153-157 (1 October 1993).	
		Martin, "The Pharmacokinetics of Hyperpolarized Xenon: Implications for Cerebral MRI," Jour. Magn. Reson. Imag., Vol. 7, No. 5, pp. 848-854 (Sep.-Oct. 1997).	
		McAdams et al., "Hyperpolarized ^3He -Enhanced MR Imaging of Lung Transplant Recipients: Preliminary Results," AJR 173, 955-959 (1999).	
		Miller et al., "Xenon NMR: Chemical shifts of a general anesthetic common solvents, proteins, and membranes", Proc. of the Nat. Acad. of Sci. (USA), Vol. 78, No. 8, pp. 4946-4949 (August 1981).	
		Miller, " ^{129}Xe NMR in Polymers," Rubber Chem. And Tech., Vol. 66, pp. 455-461 (1993).	

EXAMINER
 *EXAMINER

DATE CONSIDERED

Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		Applicants: Bastiaan Driehuys	
		Filing Date Jan. 21, 2004	Group 1616
	3	Möller et. al., "Magnetic Resonance Angiography with Hyperpolarized ^{129}Xe Dissolved in Lipid Emulsion," 41 Mag. Res. Med. No. 5, pp. 1058-1064 (1999).	
	4	Moschos, A. et al., "Communications Nuclear Magnetic Relaxation of Xenon-129 Dissolved in Organic Solvents," J. Mag. Reson., Vol. 95, pp. 603-606 (1991).	
	5	Mugler, III et al., "MR Imaging and Spectroscopy Using Hyperpolarized ^{129}Xe Gas: Preliminary Human Results," 37 Magn. Reson. In Med., Vol. 37, No. 6, pp. 809-815 (1997).	
	6	Patyal, "Longitudinal Relaxation and Diffusion Measurements Using Magnetic Resonance Signals from Laser-Hyperpolarized ^{129}Xe Nuclei," J. Magn. Reson., Vol. 126, No. 1, pp. 58-65, May 1997.	
	7	Pietraß et al., "Optically Polarized ^{129}Xe in NMR Spectroscopy," Advanced Materials, pp. 826-838 (1995)	
	8	Raftery, et al., "High-Field NMR of Adsorbed Xenon Polarized by Laser Pumping," Phys. Rev. Lett., Vol. 66, No. 5, pp. 584-587 (4 February 1991).	
	9	Rosen et al., "Polarized ^{129}Xe optical pumping/spin exchange and delivery system for magnetic resonance spectroscopy and imaging studies, Rev. Sci. Instrum., Vol. 70, No. 2, pp. 1546-1552 (February 1999).	
		Ruppert et al., "NMR of hyperpolarized ^{129}Xe in the canine chest: spectral dynamics during a breath-hold," NMR Biomed., Vol. 13, pp. 220-228 (2000).	
		Schoenborn, "Binding of Xenon to Horse Haemoglobin," Nature, Vol. 208, pp. 760-762 (November 20, 1965).	
		Swanson et al., "Brain MRI with Laser-Polarized ^{129}Xe ," Mag. Res. Med., Vol. 38, pp. 695-698 (1997).	
		Tilton, Jr., et al, "Nuclear Magnetic Resonance Studies of Xenon-129 with Myoglobin and Hemoglobin," Biochemistry, Vol. 21, No. 26, pp. 6850-6857 (1982).	
		Tseng et al., "NMR of Laser-Polarized ^{129}Xe in Blood Foam," J. Mag. Res., Vol. 126, pp. 79-86 (1997).	
		Wolber et al., "Spin-lattice relaxation of laser-polarized xenon in human blood," 96 Proc. Natl. Acad. Sci. USA, pp. 3664-3669 (March 1999).	
		Wolber et al. "In vivo hyperpolarized ^{129}Xe spectroscopy in tumors," Proc. Int'l. Mag. Reson. Med. 8, 1440 (2000).	
		Wolber et al. "In vivo hyperpolarized ^{129}Xe spectroscopy in tumors," Mag. Reson. Med. 46, pp. 586-591 (2001).	
		Albert, et.al., "Susceptibility Changes Following Bolus Injections", Appendix B reprint from Magnetic Resonance in Medicine 29 700-708 (1993)	
		Belliveau et.al., "Functional Cerebral Imaging by susceptibility-Contrast NMR, dated December 7, 1989; Magnetic Resonance in Medicine 14, 538-546 (1990)	
	4	Chupp, et.al., "Chemical Shift Imaging of Laser-Polarized ^{129}Xe Magnetization in Rats In Vivo", European Radiology 9:B45 (1999)	
	2	Driehuys, et.al., "Surface Relaxation mechanisms of Laser-Polarized ^{129}Xe ", Physical Review Letters Vol. 74, Number 24, pg 4943-4946, dated June 12, 1995	
	2	Gao, et.al., "Magnetization and Diffusion Effects in NMR Imaging of Hyperpolarized Substances", MRM	

 EXAMINER
 *EXAMINER

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		Filing Date Jan. 21, 2004	Group 1616
		37:153-158 (1997)	
	2	Luhmer, et.al., "Study of Xenon Binding Cryptophane-A Using Laser-Induced NMR Polarization Enhancement", J. Am. Chem. Soc. 3/30/1999, 121, 3502-3512	
	2	Mazitov, et.al., "NMR Spectroscopy of ^{129}Xe Dissolved in Tissues of Animals and Plants in vitro: Effect of Tissue with Cancer" Doklady Biophysics Vols 364-366, 1999	
	2	Yablonskiy et.al., "Quantitative in vivo assessment of lung microstructure at the alveolar level with hyperpolarized ^3He diffusion MRI" www.pnas.org/cgi/doi/10.1073/pnas.052594699 , PNAS, March 5, 2002, Vol 99, No 5, 3111-3116	
	2	Driehuys, et.al., Diagnostic Procedures Using Direct Injection of Gaseous Hyperpolarized ^{129}Xe and Associated Systems and Products, January 17, 2002, Publ. No. US2002/0006382A1	

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